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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/392,434	09/09/1999	LARRY L. BRADFORD	ACA6124PDUS	1107

7590

06/19/2002

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EXAMINER

SERGEANT, RABON A

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 06/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Paper No. 15

Application Number: 09/392,434

Filing Date: September 9, 1999

Appellant(s): Bradford et al.

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Richard Fennelly

For Appellant

**MAILED**  
JUN 18 2002  
**GROUP 1700**

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed March 12, 2002.

Art Unit: 1711

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-3, 5-11, 13, and 14 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

Art Unit: 1711

**(8) Claims Appealed**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) Prior Art of Record**

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,199,534	Fearing	April 22, 1980
4,268,633	Fearing	May 19, 1981
4,382,042	Hardy et al.	May 3, 1983
4,458,035	Hardy et al.	July 3, 1984
5,981,612	Keppeler et al.	November 9, 1999
5,985,965	Sicken et al.	November 16, 1999

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

Art Unit: 1711

the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5-7, 9-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicken et al. ('965) or Fearing ('534 or '633), each in view of Keppeler et al. ('612).

The primary references disclose the use of oligomeric organophosphorus flame retardants within polyurethane foams and further disclose that the oligomeric flame retardants may be blended with additional flame retardants. See column 4, line 32 within Sicken et al. See column 8, lines 27-34 within the Fearing references.

Though the primary references disclose that additional flame retarding agents may be used, the primary references fail to recite specific examples. However, non-halogenated phosphate ester compounds were widely known flame retardants for polyurethane foams at the time of invention. This position is supported by the teachings of numerous such flame retardants within Keppeler et al. at column 7, line 33 through column 8, line 67.

Therefore, the position is taken that it would have been *prima facie* obvious to select a non-halogenated phosphate ester flame retardant from the numerous flame retardants of Keppeler et al. and employ said flame retardant as a component of the aforementioned, disclosed flame retardant blend of the primary references.

Art Unit: 1711

Appellants' argument that the secondary reference provides a list of flame retardants so long that it provides no teaching to make a specific choice is not adequate to remove the art rejection. The primary references teach that mixtures comprising other flame retardants may be used and the secondary reference provides a teaching of polyurethane foam flame retardants. Appellants' component (a) flame retardants are disclosed within the secondary reference. The position is maintained that it would have been obvious to select any flame retardant from the list of the secondary reference. The burden rests with applicants to rebut the *prima facie* case of obviousness by such means as a showing of unexpected results, for example.

Claims 7, 8, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sicken et al. ('965) or Fearing ('534 or '633), each in view of Keppeler et al. ('612), as applied to claims 1-3, 5-7, 9-11, and 13 above, and further in view of Hardy et al. ('035 or '042).

As aforementioned, the combined teachings of Sicken et al. or Fearing and Keppeler et al. are considered to render obvious the combined use of oligomeric and non-oligomeric phosphorous flame retardants; however, the non-hydroxyl group bearing oligomeric species of instant claims 7, 8, 13, and 14 are not disclosed by the primary references. Still, the claimed non-hydroxy group bearing oligomeric species were known at the time of invention, as evidenced by Hardy et al. The position is taken that the oligomeric species of Hardy et al. are close enough in structure and function to those of the primary reference that one would have expected them to function with non-oligomeric flame retardants, as taught by the primary references. Therefore, it

Art Unit: 1711

would have been obvious to utilize the flame retardants of Hardy et al. with the aforementioned non-oligomeric flame retardants, so as to arrive at the instant invention.

Appellants' argument that Sicken et al. denigrate the teachings of Hardy et al. has been considered; however, the position is taken that one faced with the totality of teachings of the primary references and the secondary references would have found it obvious to employ mixtures of the respective flame retardants. Upon reading the argued passage within Sicken et al, one may have considered the oligomeric flame retardants of Hardy et al. to be less effective than the oligomeric flame retardants of Sicken et al. under certain conditions; however, one unconcerned with the hydroxy group characteristic of Sicken et al. still would have expected that mixtures of the respective flame retardants could be used, given the totality of the record.

**(11) Response to Argument**

Appellants' arguments have been addressed within the *Grounds of Rejection*.

For the above reasons, it is believed that the rejections should be sustained.

Art Unit: 1711

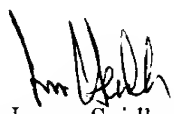
Respectfully submitted,

  
RABON SERGENT  
PRIMARY EXAMINER

R. Sargent

June 16, 2002

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